



HAMPTON HARBOR BRIDGE

# Public Advisory Committee Meeting

August 29, 2019



Innovative Planning  
BETTER COMMUNITIES

# Agenda



- Welcome and Introductions
- Recap of Project Status as of January 2019 Meeting
  - ▶ Traffic Study
  - ▶ Bridge Rehabilitation Study
  - ▶ Alignment and Profile Study
- Review of Coordination with Resource Agencies (Feb-Aug 2019)
  - ▶ Natural Resources
  - ▶ Cultural/Historic Resources
  - ▶ Navigation
- Status of Bridge Design
- Next Steps



# Recap of Project Status January 2019

# Project Status – January 2019

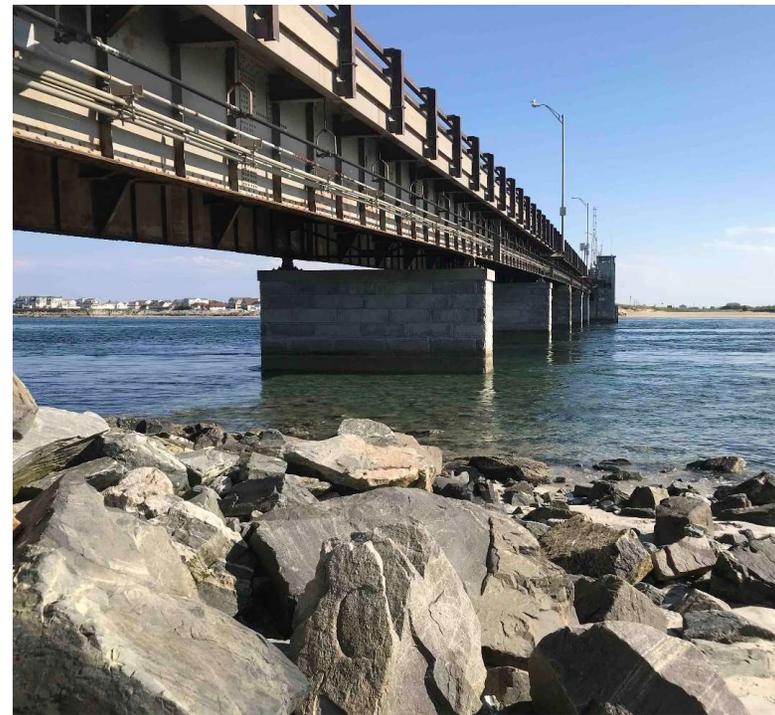


- Traffic & environmental studies underway
- Proposed roadway cross section determined
- Resource agency coordination initiated
- Three bridge alternatives at this time.

Rehabilitation of Bridge

Replacement Bridge – Bascule

Replacement Bridge – Fixed

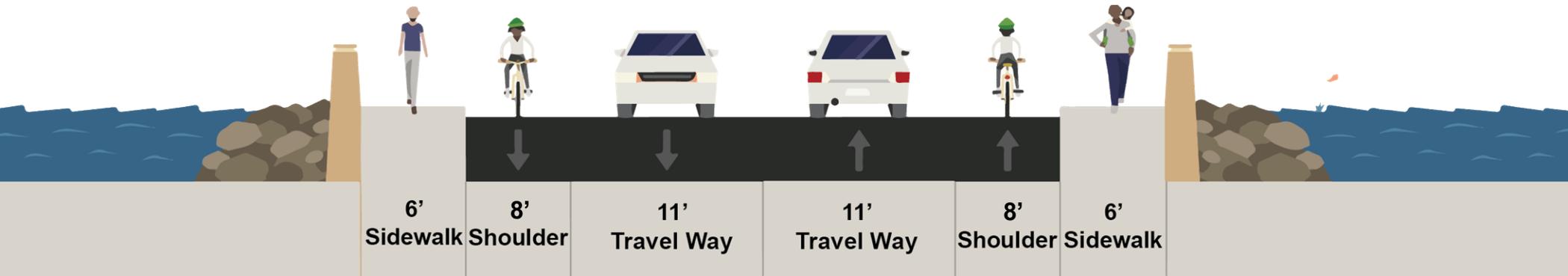


Looking south

# Traffic Study



- Assessed current and future needs of the project area
- Reviewed impacts of bascule bridge lifts
- Assessed needs for shoulders, sidewalks, number of lanes



# Study of Rehabilitation Alternative



- Assessed rehabilitation for current capabilities and long term viability
- 50' and 38' roadway considered
  - ▶ 38' roadway meets minimum standards for lane, shoulder and sidewalk widths; but does not meet the purpose and need of the project
  - ▶ 50' roadway meets purpose and need of project
- 50' roadway recommended for Rehabilitation Alternative



Bridge open to allow for vessel passage

# Alignment and Profile Study



- Eastern and Western alignments studied – West favored by Public and PAC
- Profiles:
  - ▶ Replacement with Fixed Alternative - 44' Vertical Underclearance at Channel Proposed at this time
  - ▶ Replacement with Bascule Alternative - 34' Vertical Underclearance at Channel Proposed at this time



Western Alignment



# Resource Agency Coordination & Feedback (February-August 2019)

# Natural Resources

- Attended NHDOT Natural Resources Agency Meeting Jan 2019
- Met with US Fish and Wildlife Service and NH Fish and Game to discuss federally-listed species on project site
  - ▶ 200-meter setback from habitat required April 1 – August 31
  - ▶ If not adhered to, then must go through formal consultation process



Shoreline southeast of the bridge

# Natural Resources



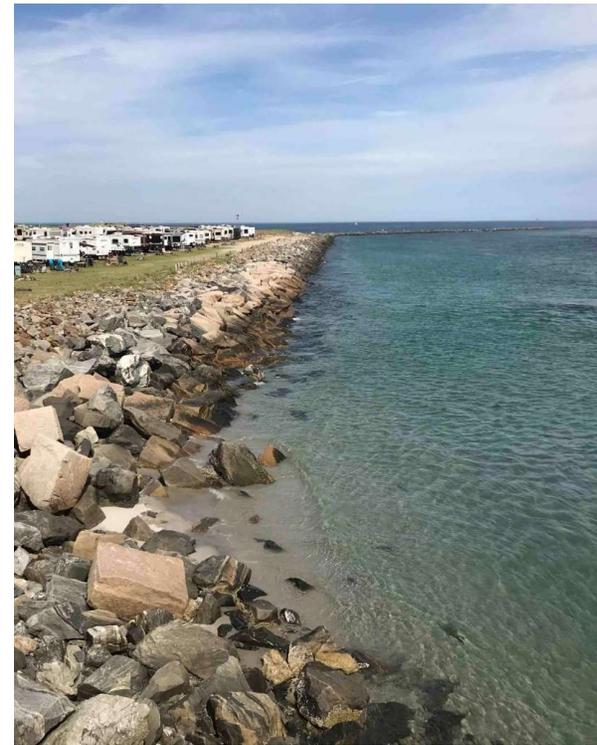
- Coordinated with NH Fish and Game regarding softshell clam bed west of the bridge
- Coordinated with NH Natural Heritage Bureau about state-listed plant species on the project site



Dune habitat on south side of bridge

# Natural Resources

- Coordinated with National Oceanic and Atmospheric Administration (NOAA) about listed aquatic species
  - ▶ In-water work restricted between March 16 and November 14
  - ▶ Programmatic Essential Fish Habitat (EFH) Assessment not feasible
  - ▶ Delineated boundaries of blue mussel bed on north side of bridge for EFH Assessment
  - ▶ Programmatic Biological Assessment potentially feasible depending on construction methodology



Rocky shoreline northeast of bridge

# Cultural Resources

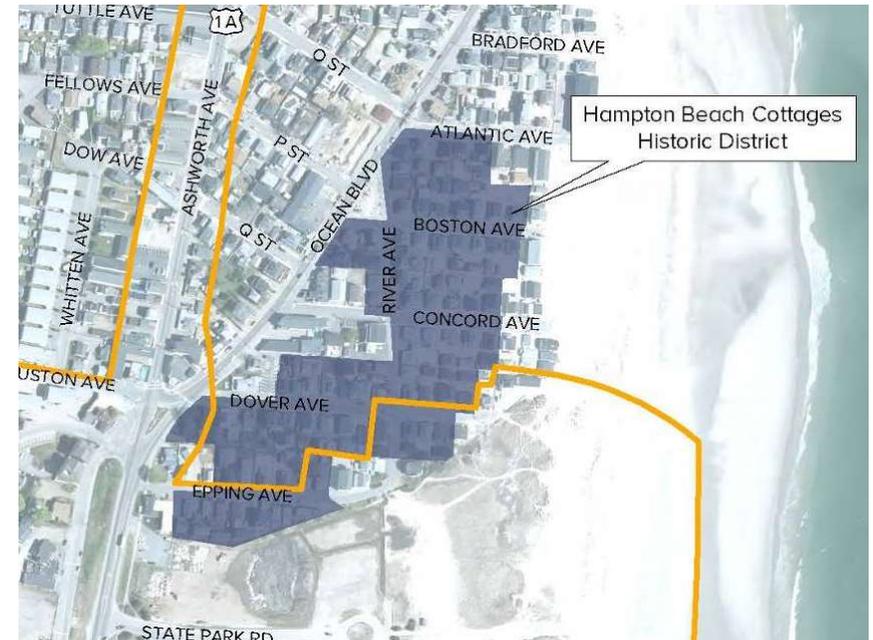


- Undertook site walk with NH Division of Historical Resources (NHDHR) and Consulting Parties (Jan 2019)
- Met with NHDHR and Consulting Parties (Feb 2019)
- Completed and submitted five Individual Inventory Forms and one District Area Form (winter 2019)
- At request of NHDHR, completed:
  - ▶ Additional three Individual Inventory Forms (late spring 2019)
  - ▶ Addendum to Phase 1A Archaeological Assessment (late spring 2019)

# Cultural Resources



- Effects evaluations underway for:
  - ▶ Neil R. Underwood Bridge (NH DOT/FHWA determined eligible; NHDHR concurred)
  - ▶ Hampton Beach Cottages Historic District (NH DOT/FHWA determined eligible; NHDHR concurred)
  - ▶ 54 River Street (NH DOT/FHWA determined ineligible; NHDHR recommended eligible)
- Historic properties also subject to Section 4(f)



Hampton Beach Cottages Historic District and Area of Potential Effects

# Section 6(f) Resources



- Initial discussion with New Hampshire Division of Parks & Recreation regarding 6(f) resources:
  - ▶ 6(f) boundary of Hampton Beach State Park unclear
  - ▶ Should minimize 6(f) conversion of State Park if feasible
  - ▶ NHDOT to further investigate limits of right-of-way
- No impacts anticipated to Harborside Park as a result of any of the alternatives



Bridge with Hampton Beach State Park in the distance

# Coordination with Dep. Of Defense



- US Army Corps of Engineers
  - ▶ Requested 48' vertical underclearance for dredge equipment
  - ▶ Stated that Seabrook/Hampton Channels would have to be modified if impacted by bridges
- US Coast Guard
  - ▶ Draft Navigational Study submitted to USCG for review
  - ▶ USCG initiating meetings with stakeholders and reviewing proposed navigational clearances

# Questions



- Before moving to the next section, please ask any questions you may have regarding
  - ▶ Public Informational Meeting Recap
  - ▶ Agency Coordination



Bridge Looking West



# Status of Bridge Design

# Four Bridge Alternatives



- Rehabilitation of Bascule (with widened bridge)
- Twin Bascule Bridge (with Rehabilitated Bridge) – **NEW**
- Replacement with Fixed Bridge
- Replacement with Bascule Bridge

# Rehabilitation Alternative



- 50' roadway recommended for Rehabilitation Alternative
  - ▶ Similar to Replacement Alternatives
  - ▶ Meets Purpose and Need of the Project
- Shifting alignment east allows for retention of operator house
- All rehabilitation options will require extensive modifications to structure



Bascule span, looking east

# Rehabilitation Alternative



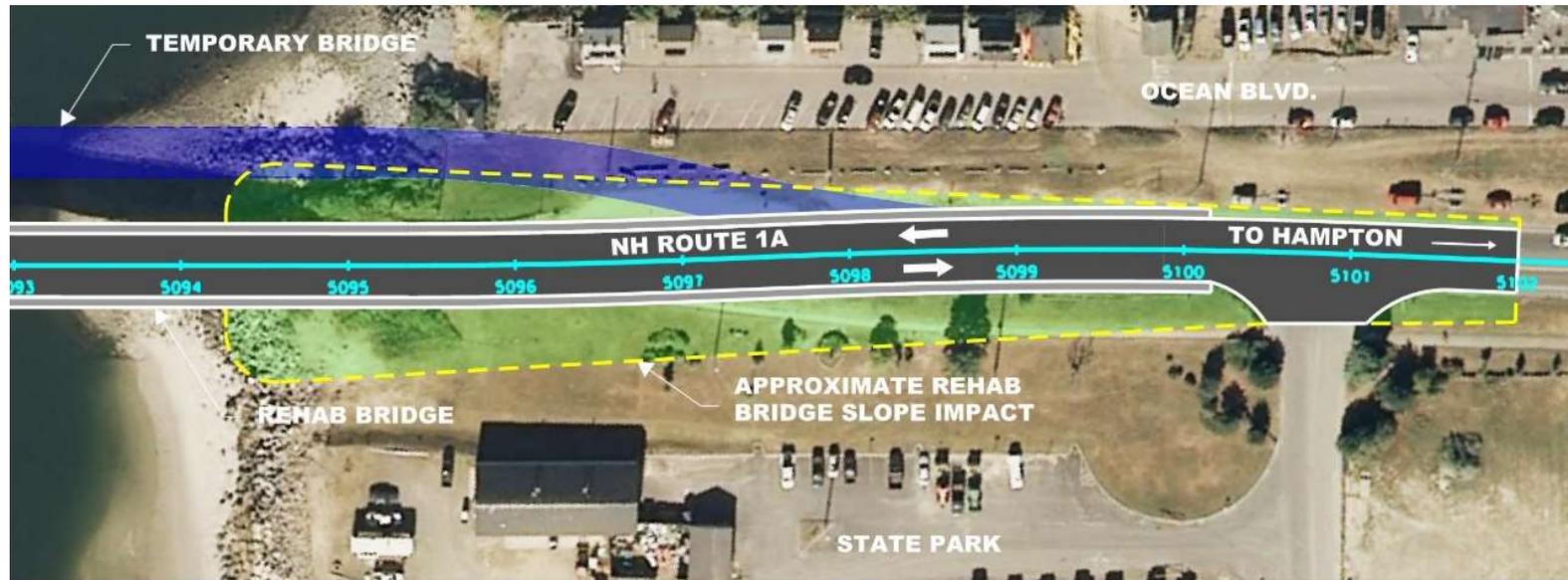
- 50' Roadway - Shifted Alignment Impact Limits - South Approach



# Rehabilitation Alternative

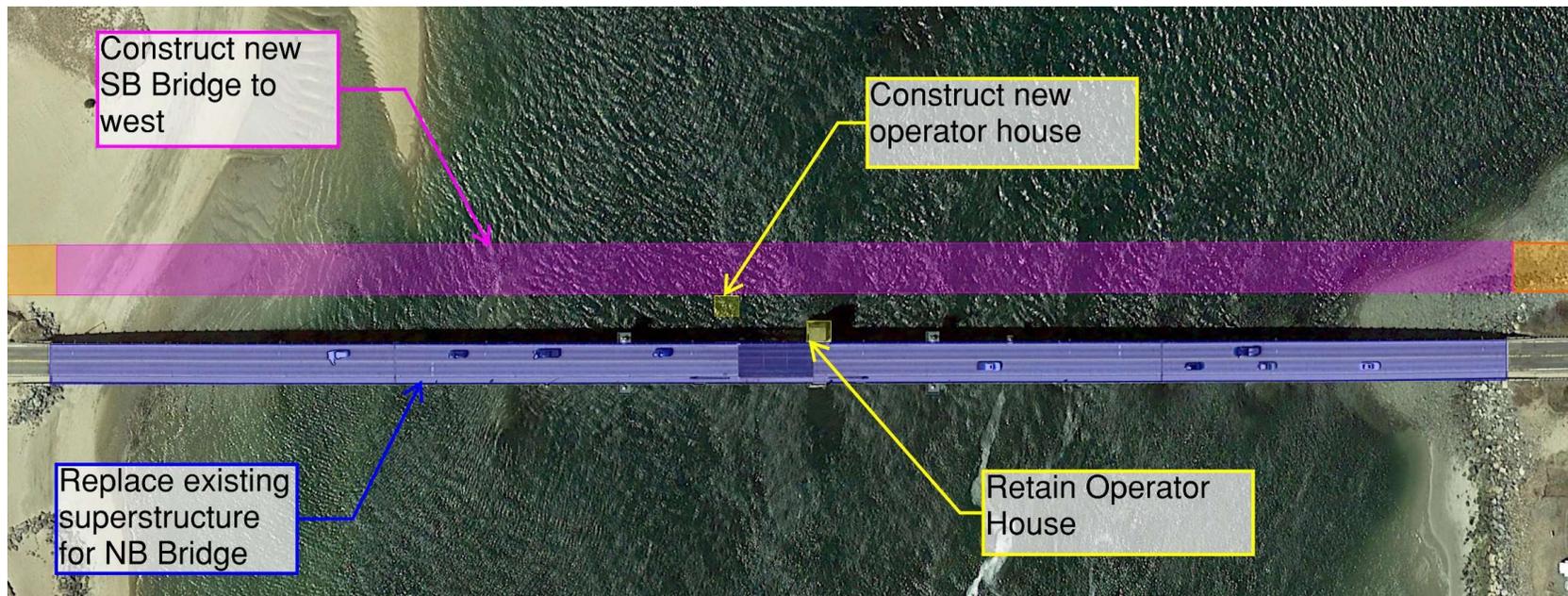


- 50' Roadway - Shifted Alignment Impact Limits - North Approach



# Twin Bridge Alternative

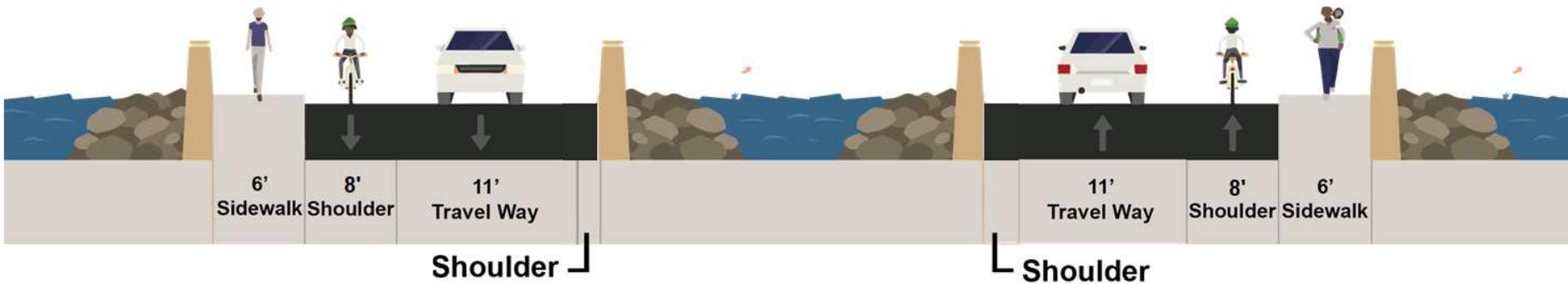
- Fourth alternative under consideration
- Meets Purpose and Need of the Project



# Twin Bridge Alternative



- Constructs new Twin Bridge west of existing
- Rehabilitates existing bridge
- Splits traffic onto two bridges
  - ▶ SB Traffic on new westerly Bridge
  - ▶ NB Traffic on rehabilitated existing bridge



Twin Bridge Typical Section

# Questions



- Before moving to the next section, please ask any questions you may have regarding
  - ▶ Rehabilitation Alternative
  - ▶ Twin Bridge Alternative



Bridge Looking West

# Replacement with Fixed Bridge



- West alignment brought forward for development
- Underclearance increased from 44' to 48' due to USACE feedback
- Engineering refinement allowed for reduction in structure height
  - ▶ Minimized increases in roadway height
- Steel and Concrete girders under consideration



Aerial of Proposed Fixed Bridge

Aerial of Proposed Fixed Bridge

# Replacement with Bascule Bridge



- West alignment brought forward for development
- Proposed underclearance remains 34'
- Steel bascule span
- Steel and Concrete girders under consideration for fixed approach spans



Aerial of Proposed Bascule Bridge

# Alignment–Replacement Alternatives



- Fixed and Bascule Bridges design refined – alignments “tucked in” – moved closer to existing bridge
- Results in reduction of impacts to west
- Does not materially increase impacts to east
- Removes impacts to navigational channel for Fixed Bridge, reduces for Bascule Bridge



# Next Steps



- Ongoing Coordination with Resource Agencies
- Fall 2019
  - ▶ Submit effects evaluations to NH Division of Historical Resources
  - ▶ Complete Type, Size & Location Study
  - ▶ Identify Preferred Alternative & Meet with Public Advisory Committee
- Winter 2019
  - ▶ Public Information Meeting